

Menopon gallinae (Family Menoponidae, Order Mallophaga) is a well known insect ectoparasite (Noble and Noble 1974). It is pale yellow in colour. The male is 1.71 mm and the female 2.04 mm. The thoracic and abdominal segments each have a row of bristles. This species is found in all domestic and wild birds, including turkey, guinea fowl, ducks and pigeons (Levine 1983). The eggs are laid in clusters on the host feathers and the life cycle is completed on the same host. The eggs hatch in two to three weeks. These lice are not blood ingesters, they feed on the barbs and scales of the host feathers. They do not infest young chicks, presumably because chicks lack well developed feathers (Cheng 1982).

In most birds, heavy infestation is generally encountered during winter. Birds affected by lice are restless because of the irritation. They become so restless that they cannot feed or sleep properly. Birds scratch their bodies to get rid of the lice and injure themselves, which leads to complications. The infestation apparently causes reduced egg production in

birds, and increases the host's susceptibility to bacterial, viral and protozoal diseases.

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6. STRANGE DEATH OF A SHIKRA

Deep in the desert, southwest of Jaisalmer in Rajasthan, I was watching a shikra (*Accipiter badius*) flying very low over the sandy plain. Suddenly it gained height, dived to the ground, then flew up, with a rodent in its talons. Through the binoculars I could not identify the species of

the small mammal. Having settled over an electric wire the shikra started feeding on the prey. While the raptor was feeding on the body of the rodent, the tail was dangling below. The bird shifted its posture and the rodent's tail touched the electric pole-bar below, there was a

flash and a spark, and the shikra dropped to the ground, dead. Apparently, through the rodent's tail, the body of the shikra was earthed, resulting in its death by electrocution. The predator had become a prey of man's electric power. Both the animals were collected. The rodent turned out to

be an Indian desert gerbil, *Meriones hurrianae* (Jerdon).

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7. MYCOTOXICOSIS - A THREAT TO WINTERING CRANES IN SAURASHTRA, GUJARAT.

The Saurashtra region (21° 10' - 24° 45' N, lat.; 68° 10' - 70° 30' E long.) of Gujarat state, India, is the most important wintering ground for the demoiselle crane *Anthropoides virgo* and common crane *Grus grus*. Several hundred thousand cranes winter in this region. In the wintering ground, the cranes mainly feed on groundnut *Arachis hypogea*. Therefore, a research project on "Assessment of crop depredation by cranes in the groundnut cropfields" was carried out in collaboration with the Indian Council of Agricultural Research, New Delhi, for three years. Field study commenced in October, 1989 and during the study period we recorded 32 cranes with peculiar symptoms, which resulted in their mortality within 2-3 days. The symptoms observed were paralysis of wing and neck, reluctance to feed, weight loss and death within 2-3 days. Dein (1989) reported that there are four major factors, bacterial, fungal, viral and animal parasites, which affect cranes both in captivity and in the wild. The cranes were probably suffering from mycotoxicosis, caused by the fungus *Aspergillus flavus*, which produces a toxin called aflatoxin. The fungus is a normal constituent of the microflora in air, soil and water and is associated with living or dead plants and animals throughout the world. Aflatoxins are carcinogenic and mutagenic, and were implicated in an outbreak of hepatitis in tribal areas of more

than 200 villages of Rajasthan and Gujarat in 1974. It was observed that groundnut and its products are a favourable substrate for the growth of *A. flavus*, when its moisture content exceeds 9% (ICAR Report 1987).

In Saurashtra, the groundnut crop is harvested during July and October. Hence, at the arrival time of the cranes, most of the harvested fields have left over groundnut pods. During winter, the moisture content of the soil and groundnut may increase, which favours the growth of *A. flavus*. Thus, mycotoxicosis reached a peak during January and February. Furthermore, during our study period we visited only 30% of the waterbodies of Saurashtra region, in which we recorded 32 diseased cranes. Hence, there are possibilities of more cranes with similar disease. The afflicted cranes are unable to move due to paralysis of their wings and legs, and fall easy prey to such predators as the village dog, fox and jackal.

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